DETAILED ACTION

This is a first office action in response to the applicant's initial Application and Preliminary Amendment, both dated 1/17/2006.

In the amendment;

The applicant has cancelled claims 1-25.

Claims 26-44 were added as New.

Claims 26-44 are herein presented for examination.

Priority

1. The examiner acknowledges receipt of the applicant's claim of priority to 3/26/2004.

Information Disclosure Statement

2. The examiner has considered the applicant's IDS dated 1/17/2006.

Claim Objections

3. Claims 1, 37-38 and 40-44 are objected to because of the following informalities:

Each claim recites the following limitation, "... a communication portion that sends/receives data to/from the ...". The use of a "slash" (/) between the words has not been defined as to its meaning, and such usage therefore fails to clearly state the claim's intention. The question that arises when reading the claim is, whether the communication portion is only a sender, or only a receiver, or is it a transceiver? The

same question arises in regard to "to/from". The examiner requests that the applicant more clearly state what the claim intends to patent, without the use of the slash. Appropriate correction is required.

4. The examiner objects to the arrangement of the identification portion limitations. The present arrangement fails to clearly show the distinction of the three power supplies, leading one of ordinary skill to object because "a power supply" of each device should be clearly defined as separate parts of each of the three device types. Either the power supplies should have distinctive names (instead of "a power supply"), or the claim layout should clearly show indention of the three devices to clearly delineate the three power supplies.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claim 27 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The phrase at line 6, "...electric device that is kept run with a power supply being kept switched ON ..." is grammatically incorrect. Please correct the phrase with proper usage.

7. Claim 33 recites the limitation "the always ON storage portion" in line 6. There is insufficient antecedent basis for this limitation in the claim.

8. Claims 34 and 35 and 36 are each rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. There is "a transmission rate" instantiated in claim 26. If "a transmission rate" (lines 3 and 6/7) is different than the already instantiated rate of claim 26, then please rename the subject of this claim differently, otherwise the examiner request changing to "the transmission rate" in each case herein.

9. Claims 43 and 44 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Line 3 recites "a home electric device" and "a network", and it is not clear to the examiner if this is the same device and network that was instantiated in claim 26 and 38 respectively. The examiner requests clarification, as the claim is indefinite in that respect.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

11. Claims 26, 37 and 41-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Frank et al. (herein Frank), US Patent No. 6026150, in view of Tran et al. (herein Tran), US Patent No. 6574289.

As per claims 26 and 37 and 41 and 42 and 43:

Frank teaches a system comprising a communication processing device as in claim 26 and 41 (as depicted in FIG. 2) and a computer program product as in claim 37 and 42 that links a home electric device (FIG. 1 11 for example) to a network (FIG. 1 12-18 for example, over medium 2), characterized by comprising: a communication portion (FIG. 2 106) that sends/receives data to/from the home electric device (FIG. 2 114 transmitter and 115 receiver); a detection portion (FIG. 4 305) that detects a communication error status (column 6 lines 40-57 for example) with the home electric device, but fails to further disclose storage of the status. But in the analogous art of Tran, such a feature is taught wherein the similar device (FIG. 2C) contains a storage portion (FIG. 2C 258) that stores the communication error status detected by the detection portion (decoder 262); and a setting portion (the controller 256 of FIG. 2C) that sets a transmission rate with the home electric device (see process 3000 in FIG. 3) on a basis of a last communication error status stored in the storage portion (FIG. 3 3008a, 3008b, 3008c, 3008d) and a latest communication error status detected by the detection portion (FIG. 3 3008 from received frame in 3006). And in column 2 lines 13-25, the advantage stated by Tran is a more effective means of control of a variable rate system which would require minimum system upgrade. One with ordinary skill in the art

at the time of the invention, motivated as suggested, would have found it obvious to improve the limited rate control system of Frank with the improved system of Tran in order to more efficiently and economically control transmission rates in a home system.

12. Claims 27, 30-31, 35, 38-40 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Frank et al. (herein Frank), US Patent No. 6026150, in view of Tran et al. (herein Tran), US Patent No. 6574289 as applied to claim 26 above, and further in view of Powers et al. (herein Powers), US Patent Application Publication No. 2005/0182977.

As per claim 27:

Where Frank and Tran fail to further disclose, the analogous art of Powers discloses the communication processing device according to claim 26, further comprising: an identification portion (FIG. 4 460 for example) that identifies a type of the home electric device as *any one of* [a normally OFF home electric device for which a power supply is switched OFF when not in use and the power supply is switched ON when used, an always ON home electric device that is kept run with a power supply being kept switched ON, and] a stand-by home electric device for which a power supply is switched to a stand-by state when not in use (paragraph [0008] for example) and the power supply is switched ON when used (see FIG. 8 840), and where Tran further discloses that which Powers does not, wherein the setting portion (the controller 256 of FIG. 2C) sets the transmission rate with the home electric device on the basis of the last communication error status stored in the storage portion and the latest communication

error status detected by the detection portion depending on the type of the home electric device identified by the identification portion (as in the Abstract, apriori metrics of FIG. 3 are used with the latest metric of step 3008). And in paragraph [0006] the advantage stated is a better approach to managing power without sacrificing response to to incoming signals. One of ordinary skill in the art, at the time of the invention, would have found it obvious to apply the improvements of Powers (the state management component) with the system of Frank and Tran in order to more efficiently handle communications in a home network.

As per claim 30:

Tran further discloses the communication processing device according to claim 27, wherein: the storage portion (memory 258, FIG. 2C) includes an always ON storage portion that stores the communication error status detected by the detection portion when the home electric device is the always ON home electric device (this mode is the default action of FIG. 3); and the setting portion sets the transmission rate with the home electric device on the basis of the last communication error status stored in the always ON storage portion and the latest communication error status detected by the detection portion when the home electric device is the always ON home electric device (the process of FIG. 3). And in view of the motivation previously stated, the claim is rejected.

As per claim 31:

Tran further discloses the communication processing device according to claim 30, wherein: the detection portion detects a communication error ratio with the home

electric device for every certain period when the home electric device is the always ON home electric device; the always ON storage portion stores the communication error ratio detected by the detection portion when the home electric device is the always ON home electric device; and the setting portion sets the transmission rate with the home electric device on the basis of a last communication error ratio stored in the always ON storage portion and a latest communication error ratio detected by the detection portion when the home electric device is the always ON home electric device. This process is the default operation in FIG. 3. And in view of the motivation previously stated, the claim is rejected.

As per claim 35:

Tran further discloses the communication processing device according to claim 31, wherein: the setting portion sets a transmission rate lower than a transmission rate at which the latest communication error ratio is detected when both the last communication error ratio stored in the storage portion and the latest communication error ratio detected by the detection portion are equal to or higher than a specific threshold value, and sets a transmission rate higher than the transmission rate at which the latest communication error ratio is detected when both the last communication error ratio stored in the storage portion and the latest communication error ratio detected by the detection portion are lower than the specific threshold value. This process is taught in FIG. 3. And in view of the motivation previously stated, the claim is rejected.

As per claims 38 and 40 and 44:

Frank teaches a system comprising a communication processing device as in claim 40 (as depicted in FIG. 2) and a computer program product as in claim 38 that links a home electric device (FIG. 1 11 for example) to a network (FIG. 1 12-18 for example, over medium 2), characterized by comprising: a communication portion (FIG. 2 106) that sends/receives data to/from the home electric device (FIG. 2 114 transmitter and 115 receiver); but where Frank fails, Tran further discloses a save portion that saves plural transmission rates settable in the communication processing device (FIG. 2C 258 and FIG. 3 3008a-d)); and a setting portion (the controller 256 in FIG. 2C) that sets a transmission rate on a basis of plural transmission rates settable in the home electric device (FIG. 3) and received at the communication portion and the plural transmission rates saved in the save portion, wherein: and Frank further discloses the communication portion sends a transmission rate notice to the home electric device to inform a transmission rate that the setting portion is to set before the setting portion sets the transmission rate (FIG. 5 701 contains the data rate); the setting portion sets the transmission rate when the transmission rate informed by a reply to the transmission rate notice from the home electric device received at the communication portion coincides with the transmission rate to be set (FIG. 5 711); and the communication portion sends confirmation data to the home electric device to confirm that communications are enabled with the home electric device at the set transmission rate after the setting portion sets the transmission rate (the second burst in FIG. 5). And in view of the motivation previously stated, the claim is rejected.

As per claim 39:

Powers further teaches the communication processing device according to claim 38, wherein: the communication portion sends the confirmation data to the home electric device when a predetermined time has passed since the reply to the transmission rate notice is received from the home electric device (paragraph [0005]. And in view of the motivation previously stated, the claim is rejected.

Allowable Subject Matter

13. Claims 28-29, 32-34 and 36 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The following is a statement of reasons for the indication of allowable subject matter: The reference art of Frank, Tran and Powers disclose a system, program product and device for communication in a home network comprising a communication portion, a detecting portion, a storage portion, and a setting portion that in combination provide fast and efficient adaptive feedback for control of transmission transfer rates by means of apriori data determined from previous transfers of data for each device in the network. But the references have failed to further provide disclosure or suggest the unique features as are claimed in claims 28-29, 32-34 and 36 as follows:

As per claim 28:

The storage portion includes a normally OFF storage portion that stores the communication error status detected by the detection portion when the home electric device is the normally OFF home electric device.

As per claims 29 and 34:

The claims are dependent on claim 28 and are at least allowable for that reason.

As per claim 32:

The storage portion includes a stand-by storage portion that stores the communication error status detected by the detection portion when the home electric device is the stand-by home electric device.

As per claims 33 and 36:

The claims are dependent on claim 32 and are at least allowable for that reason.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOHN P. TRIMMINGS whose telephone number is (571)272-3830. The examiner can normally be reached on Monday through Thursday, 7:00 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jacques Louis-Jacques can be reached on (571) 272-6962. The fax phone

number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/John P Trimmings/
Primary Examiner, Art Unit 2117

jpt